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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,563	06/28/2001	Tony G. Hamilton	42390P11843	7969

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EXAMINER

JEAN GILLES, JUDE

ART UNIT PAPER NUMBER

2143

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/896,563

Applicant(s)

HAMILTON ET AL.

Examiner

Jude J. Jean-Gilles

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Action is in regards to the Reply received on 05/02/2006.

Response to Amendment

1. This action is responsive to the application filed on 06/28/2001. Claims 17-40 are pending. Claims 17-40 represent a method and apparatus for a "Method to provide direct system storage access within a notebook computer via a wireless interconnect and a low power high-speed data management bus while the main CPU is idle".

Response to Arguments

2. Applicant's arguments with respect to claims 17, 27, 33, and 38 have been carefully considered, but are not deemed fully persuasive. Applicant's arguments are deemed moot in view of the following new ground of rejection as explained here below, necessitated by Applicant substantial amendment (i.e., a method wherein the system remains idle while executing the data transfer to the storage device...) to the claims which significantly affected the scope thereof.

The dependent claims stand rejected as articulated in the First Office Action and all objections not addressed in Applicant's response are herein reiterated.

In response to Applicant's arguments, 37 CFR § 1.11(c) requires applicant to "clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must show the amendments avoid such references or objections."

Drawings

3. Newly submitted formal drawings are accepted and the previous objection with regards to the drawings is withdrawn.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 17-40** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (hereinafter Fukuda), Patent No. 6,930,987 B1 in view of Ali et al. (hereinafter ali), U.S. Patent No. 6,353,927 B1.

Regarding **claim 17**, Fukuda discloses the invention substantially as claimed. Fukuda teaches a method, comprising:

activating an idle storage device in a computer system to transfer data while a main processor of the computer system remains idle (column 20, lines 3-10);
executing the data transfer to the storage device (column 20, lines 1-20);
returning system resources to an idle state (column 20, lines 39-56).

Applicants argue that Fukuda does not specifically disclose activating an idle device in a computer system to transfer data while a main processor remains idle.

In the same field of endeavor, Ali discloses "...*the on-board processor 202 enters the idle state, the external processor 240 monitors the level of an idle signal 210 from the on-board processor 202 through any appropriate I/O register. The idle signal 210 may be activated by the on-board processor 202 at any appropriate time determined by the application. ...*" [see Ali; column 3, lines 18-26; also see abstract].

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Ali's teachings of a method and apparatus for activating an idle device in a computer system to transfer data while a main processor remains idle with the teachings of Fekuda, for the purpose of providing a technique to download data into memory in an assembled printed circuit board as stated by Ali in lines 10-15 of column 1. By this rationale **claim 17** is rejected.

Regarding claim 18: the combination Fukuda-Ali discloses the method of claim 17, further comprising:

buffering the data for transfer (see fig. 16, item 86; column 20, lines 39-56).

Regarding claim 19: The combination Fukuda-Ali discloses the method of claim 17, further comprising:

detecting a request for data transfer to activate the idle storage device while the main processor of the computer is idle (see Fukuda column 20, lines 1-59; column 29, lines 35-60).

Regarding claim 20: The combination Fukuda-Ali discloses the method of claim 19, wherein a controller activates the idle storage device by directing power to the device (see Fukuda column 29, lines 35-65);

Regarding claim 21: The combination Fukuda-Ali discloses the method of claim 17, further comprising:

tagging the transferred data for recognition (see Fukuda column 29, lines 3-65; column 30, lines 3-40);

Regarding claim 22: The combination Fukuda-Ali discloses the method of claim 17, further comprising:

apportioning a system time and power resource based on the transferred data (see Fukuda column 30, lines 39-55; column 18, lines 58-67; column 19, lines 1-21).

Regarding claim 23: The combination Fukuda-Ali discloses the method of claim 22, further comprising:

returning the system resource to a pre-transfer state (see Fukuda column 20, lines 39-56).

Regarding claim 24: The combination Fukuda-Ali discloses the method of claim 17, further comprising:

notifying a user of the computer system of the data transfer after the system is returned to an idle state (see Fukuda column 29, lines 32-64).

Regarding claim 25: The combination Fukuda-Ali discloses the method of claim 17, wherein the data is transferred wirelessly (see Fukuda column 32, lines 8-60).

Regarding claim 26: The combination Fukuda-Ali discloses the method of claim 17, wherein the data is transferred via a low level data bus (see Fukuda column 27, lines 14-35).

Regarding claim 27: The combination Fukuda-Ali discloses an apparatus comprising:

means for activating an idle storage device in a computer system to transfer data while a main processor of the computer system remains idle (see Fukuda column 20, lines 3-10) and [see Ali; column 3, lines 18-26; also see abstract];

means for executing the data transfer to the storage device (see Fukuda column 20, lines 1-20);

means for returning system resources to an idle state (see Fukuda column 20, lines 39-56).

Regarding claim 28: The combination Fukuda-Ali discloses the apparatus of claim 27, further comprising:

means for buffering the data for transfer (see fig. 16, item 86; column 20, lines 39-56).

Regarding claim 29: The combination Fukuda-Ali discloses the apparatus of claim 27, wherein the means for activating the idle storage device comprise a controller that detects a request for data transfer while the main processor of the computer is idle (see Fukuda column 20, lines 1-59; column 29, lines 35-60).

Regarding claim 30: The combination Fukuda-Ali discloses the apparatus of claim 29, wherein the controller activates the idle storage device by directing power to the device (see Fukuda column 29, lines 35-65).

Regarding claim 31: The combination Fukuda-Ali discloses the apparatus of claim 27, wherein the data is transferred wirelessly (see Fukuda column 32, lines 8-60).

Regarding claim 32: The combination Fukuda-Ali discloses the apparatus of claim 27, wherein the data is transferred via a low level data bus (see Fukuda column 27, lines 14-35).

Regarding claim 33: The combination Fukuda-Ali discloses a machine-readable medium having executable instructions to cause a processor to perform a method, the method comprising:

activating an idle storage device in a computer system to transfer data while a main processor of the computer system remains idle (see Fukuda column 20, lines 3-10) and [see Ali; column 3, lines 18-26; also see abstract];

executing the data transfer to the storage device (see Fukuda column 20, lines 1-20); and

returning system resources to an idle state (see Fukuda column 20, lines 39-56).

Regarding claim 34: The combination Fukuda-Ali discloses the machine-readable medium of claim 33, wherein the method further comprises:

Buffering the data for transfer (see fig. 16, item 86; column 20, lines 39-56).

Regarding claim 35: The combination Fukuda-Ali discloses the machine-readable medium of claim 34, wherein the idle storage device is activated by a

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controller that detects a request for data transfer while the main processor of the computer is idle (see Fukuda column 20, lines 1-59; column 29, lines 35-60) and [see Ali; column 3, lines 18-26; also see abstract].

Regarding claim 36: The combination Fukuda-Ali discloses the machine-readable medium of claim 33, wherein the method further comprises;

apportioning a system resource based on the transferred data (see Fukuda column 20, lines 3-56).

Regarding claim 37: The combination Fukuda-Ali discloses the machine-readable medium of claim 36, wherein the method further comprises:

returning the system resource to a pre-transfer state (see Fukuda column 20, lines 39-56).

Regarding claim 38: The combination Fukuda-Ali discloses a computer system comprising:

a processor coupled to a memory through a bus (see Fukuda column 32, lines 8-60);

a unit to activate a storage device in a computer system to transfer data while the processor system remains idle, the unit to (see Fukuda column 20, lines 3-10) and [see Ali; column 3, lines 18-26; also see abstract];

execute the data transfer to the storage device (see Fukuda column 20, lines 1-20); and the unit to

return system resources to an idle state (see Fukuda column 20, lines 39-56).

Regarding claim 39: The combination Fukuda-Ali discloses the system of claim 38, further including a buffer to store data to be transferred (see fig. 16, item 86; column 20, lines 39-56).

Regarding claim 40: The combination Fukuda-Ali discloses the system of claim 38, further including a unit to detect a request for data transfer to activate the idle storage device while the main processor of the computer is idle (see Fukuda column 20, lines 1-59; column 29, lines 35-60) and [see Ali; column 3, lines 18-26; also see abstract].

Response to Arguments

6. Applicant's Request for Reconsideration filed on 05/02/2006 has been carefully considered but is not deemed fully persuasive. However, because there exists the likelihood of future presentation of this argument, the Examiner thinks that it is prudent to address Applicants' main points of contention.

The Fukuda patent fails to disclose or suggest, a method wherein the system remains idle while executing the data transfer to the storage device with respect to independent **claims 17, 27, 33, and 38**.

7. It is the position of the Examiner that Fukuda in detail teaches the limitations of the above mentioned claims. However, in view of Applicant's remarks and amendment, new patent of Ali is used address the issue of activating a storage device in a computer

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system to transfer data while the processor remains idle [see Ali; column 3, lines 18-26; also see abstract and the rejection of **claims 17, 27, 33, and 38** above].

Examiner notes with delight that no new matter has been added and that the new claims are supported by the application as filed. However, applicant has failed in presenting claims and drawings that delineate the contours of this invention as compared to the cited prior art. Applicant has failed to clearly point out patentable novelty in view of the state of the art disclosed by the references cited that would overcome the 102(e) anticipation and the 103(a) rejections applied against the claims, the rejection is therefore sustained.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914.

The examiner can normally be reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley, can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-9000.

Jude Jean-Gilles

Patent Examiner

Art Unit 2143

JJG 

August 11, 2006


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